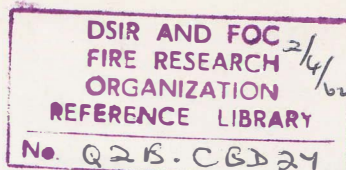


CANADIAN

BUILDING DIGEST



DIVISION OF BUILDING RESEARCH • NATIONAL RESEARCH COUNCIL

CANADA

SOURCES OF INFORMATION ON BUILDING

by Eileen R. Carson

UDC 026:69

This issue of Canadian Building Digests, as may readily be seen, differs from those so far published. It is not intended to be read as a concise summary of the present state of building documentation, but rather as a guide to some of the main sources of printed information on building. The arrangement has been designed for convenience; the listing opposite will facilitate rapid use of the Digest as a reference list. The amount of printed information now being issued each year even on the restricted subject of building science is so extensive that even such a listing as this is an introduction only to the main aids in the field of building documentation.

It is hoped that this Digest will serve also to indicate something of the resources that are already available in the Library of the Division of Building Research, which operates as a branch of the main Library of the National Research Council, the national science library of Canada. The Division's Library is being developed to serve not only the specialized needs of the DBR staff but also the more general needs of the construction industry of Canada. Visitors are therefore cordially welcome. Those who by reason of distance are unable to visit the Library are encouraged to send their written inquiries to the Librarian and to arrange to obtain the monthly Accession Lists. The writer of this Digest is the Librarian to the Division.

R. F. Legget, Director

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DBR

OTTAWA

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CBD 27

1. The Abundance of Building Information

Since the beginning of the twentieth century literature on the art and science of building has mushroomed to such an extent that keeping up with it is extremely difficult. It is directed not only to the research officer, but also to the building industry in order to communicate solutions to some of its most trying problems.

The following figures on building information received by the DBR/NRC Library may give some idea of the mass of information available.

The Library receives:

- over 1000 magazines and serials each month,
- over 350 books each year, and
- over 3500 individual reports and pamphlets each year.

2. Publication of Building Information

2.1 Magazines

The latest theories, practices and news about building products can be found in the wealth of magazines published today. Two good sources of those that are available on subscription are:

Serials Held in the Building Research Library.
Available from the Division of Building Research, National Research Council, Montreal Road, Ottawa 2, Ontario.

Directory of Canadian Scientific and Technical Periodicals (NRC 6104). Available free upon request from the National Research Council Library, Sussex Drive, Ottawa 2, Ontario.

Abstracting and indexing bulletins publish lists that aid the selection of magazines. The majority also list the magazines they review. Section 4 of this Digest discusses abstracting and indexing bulletins and their use.

The directory and special issues of Canadian trade periodicals such as Automatic Heating, Plumbing/Air Conditioning, Daily Commercial News, Engineering and Contract Record, National Builder, Roads and Engineering Construction are helpful for they publish such useful information as lists of federal, provincial and municipal officials, directories of consulting engineering firms, building products manufacturers and associations allied with the building industry.

2.2 Pamphlets

Much valuable material is published free of charge or at a nominal price by associations and government bodies. Section 2.4 provides the addresses of such organizations. Because many of the sources of worth-while free material do not keep mailing lists, their publications have to be requested after news of their availability has been published in building magazines. Accession lists or lists of recently received publications distributed by building research organizations are useful in tracking down this type of publication. Examples of such lists are:

Recent Additions to the Building Research Library.
Published monthly by the Division of Building Research, National Research Council, Montreal Road, Ottawa 2, Ontario.

Housing and Planning References.
Published bi-monthly by the Office of the Administrator Library, Housing and Home Finance Agency, Washington 25, D.C.

National Housing Center Library Bulletin. Published ten times a year by the Library of the National Association of Home Builders, 1625 L Street, Washington 6, D.C.

Royal Institute of British Architects. Library Bulletin.
Published quarterly by the RIBA, 66 Portland Place, London, W. 1, England. Subscription 10s. per annum.

Recent Additions to the Library. Published twice a month by the National Research Council, Sussex Drive, Ottawa 2, Ontario.

The following are representative of the pamphlets issued by building associations and government bodies during 1961.

American Institute of Steel Construction.
Standard specifications and loading tables for open web steel joists (Longspan or L-series).

British Columbia Lumber Manufacturers Association.
Post and beam.

British Constructional Steelwork Association.
Publication n. 14. The use of welding in steel building structures, rev. by G. Bernard Godfrey.

Building Research Institute (Washington).
Preassembled building components.

Cement and Concrete Association (London).
Concrete block walls, 3rd. ed., rev.

Fire Protection Association.
Fire Protection Bulletin, n. 8. Fire protection for builders and structural engineers.

Great Britain. D.S.I.R. Building Research Station.
Factory Building Studies n. 8. Colouring in factories, by H. L. Gloag.

Great Britain. D.S.I.R. National Physical Laboratory.
Sound absorbing materials, by E. J. Evans and E. N. Bazley.

Highway Research Board. Special Report n. 60. Soil and foundation engineering in the Union of Soviet Socialist Republics.

Housing and Home Finance Agency. Urban Renewal Administration.

Technical Guide n. 6. Residential property conservation standards.

Housing Centre (London).

Two to five in high flats; an enquiry into play provision for children aged two to five years living in high flats.

Illinois University. Small Homes Council. Sixteenth annual short course in residential construction, January 18-19, 1961.

Illuminating Engineering Society (London). The I.E.S. code; recommendations for good interior lighting.

National Building Studies.

Research Paper n. 32. The forces applied to the floor by the foot in walking, by F. C. Harper and others.

National Lumber Manufacturers Association. Technical Report n. 1. Comparative fire test on wood and steel joists.

National Research Council. Division of Building Research.

Technical Paper n. 118 (NRC 6193). Building law in Canada; a study prepared for the Associate Committee on the National Building Code, by J. M. Robertson.

Ontario Fire Marshal.

Hospital fire safety design standard.

Society of Plastics Engineers.

Plastics for architects, artists and interior designers.

Stanford University School Planning Laboratory.

Report n. 1. The relationship of initial cost and maintenance cost in elementary school buildings, by W. J. Zimmerman.

Texas Agricultural and Mechanical College. Architectural Research Group.

Shelter for physical education; a study of the feasibility of the use of limited shelters for physical education.

U.S. Department of Agriculture Handbook n. 194. Snow avalanches; a handbook of forecasting and control measures.

U.S. Forest Products Laboratory Report n. 2202. The performance of wood in fire, by H. O. Fleischer.

U.S. National Bureau of Standards Handbook n. 74. Building code requirements for reinforced masonry.

2.3 *Manufacturers' Technical Literature*

Building products and equipment manufacturers issue a great deal of useful material in their literature. Two publications that contain technical information about building products manufactured in the United States are:

Architectural Catalog File.

Published yearly by Sweet's Catalog Service Division, 119 West 40 St., New York 18, N.Y. 1961 edition contained in twelve volumes. Subscription approximately \$150.

American Institute of Architects.

Building Products Register.

Published in 1959 by the American Institute of Architects, 1735 New York Avenue N.W., Washington 6, D.C.

A second edition of the Register is now in preparation.

2.4 *Directories*

One of the problems of obtaining building information is finding the addresses of the organizations whose standards and publications are mentioned in the building literature. For information about organizations in the United States one might consult:

Building Research Institute. Building Science Directory.

Published by Building Research Institute, 2101 Constitution Ave., Washington, D.C. The Directory costs \$20 (U.S.). The subscription price for the quarterly supplements is \$5 (U.S.) yearly.

This directory contains individual data pages describing the research programs and publications of associations, colleges and universities, and public bodies engaged in building research in the United States.

For addresses of organizations in Canada one might consult:

Canadian Almanac.

Published yearly by the Copp Clark Publishing Co., Toronto. Cost \$11.

Often the names and addresses of manufacturers of particular building products are needed. Two sources of such information are:

Fraser's Canadian Trade Directory.

Published yearly by Fraser's Trade Directories Ltd., 6833 de L'Epee Ave., Montreal 15, Quebec. Subscription price \$12.50.

Canadian Trade Index.

Published yearly by the Canadian Manufacturers' Association, 67 Yonge St., Toronto 1, Ontario. Subscription price \$15.

2.5 Books

Excellent books have been published dealing with the building field, and although it is impossible to list them a guide to current ones is provided by the accession lists issued by various agencies. (These sources of information will be discussed in section 4 of this Digest.) Further guidance, however, is often needed in the selection of the few that one can afford, and it is a good idea to wait for book reviews in magazines that one has learned to trust.

Two valuable books, which Canadians may not have noted, were published by Her Majesty's Stationery Office, P.O. Box 569, London, S.E.1, England. They are:

Principles of Modern Building. Department of Scientific and Industrial Research, Building Research Station. London, 1960 and 1961. 2 volumes, 17s. 6d. each.

In these volumes the staff of the British Building Research Station have synthesized their accumulated experience in the fields of functional requirements of building. Part I of volume I deals with the principles of the functional performance of a building as a whole. Part II of volume I discusses their specific application to walls and other vertical elements. Volume II deals with their application to floors, roofs and other horizontal elements.

3. Arrangements of Building Information

How does an architect, engineer or contractor make the best use of available information? Are there short cuts to locating the answers to his questions? Manuals, codes, standards, specifications, pamphlets and manufacturers' catalogues arranged according to a good filing system are the main aids in solving this problem. The work may be done by a junior employee under the active supervision of a senior member who is responsible for maintaining the system.

During the past 30 years many systems have been developed for arranging building literature. Only the four recommended by major building organizations will be discussed in this Digest.

3.1 AIA/RAIC Standard Filing System

American Institute of Architects.

Standard filing system and alphabetical index. Available from the Royal Architectural Institute of Canada, 88 Metcalfe St., Ottawa. \$3.

The AIA standard filing system is probably the system most familiar to all Canadian architects, since it is recommended by the RAIC-

CCA committee for the preclassification of manufacturers' trade literature.

The classifications and their file number designations are arranged under 41 "Major Divisions," the titles of which conform, in general, to those usually included in a comprehensive construction and mechanical equipment specification.

3.2 American Institute of Architects.

The AIA filing system for architectural plates and articles.

Available from the Royal Architectural Institute of Canada, 88 Metcalfe St., Ottawa. \$1.

This system is to be used in conjunction with the AIA Standard Filing Manual, which is used for filing manufacturers' technical literature only. These two systems provide an adequate way of filing building literature so that it is readily available for use.

3.3 ABC or Abridged Building Classification

International Building Classification Committee.

ABC: abridged building classification for architects, builders, civil engineers. Published by the International Council for Building Research, Studies and Documentation, c/o Bouwcentrum, 700 Weena, Rotterdam, Holland. Approx. \$3.

The ABC is a shortened and specialized version of Universal Decimal Classification, which is used by many magazines and libraries in the building field for indexing purposes. The UDC, in turn, is based on the Dewey Decimal Classification widely used in public libraries in the United States and Canada. According to the Dewey Classification, all knowledge is divided into ten main groups.

A knowledge of the ABC is helpful since it gives the architect and engineer an insight into the principles of the UDC.

3.4 RIBA SfB/UDC Filing Manual

SfB/UDC Building Filing Manual.

Published by the Royal Institute of British Architects Information Service, 66 Portland Place, London, W. 1, England. 36s.

The SfB/UDC Building Filing Manual, published early in November 1961 by the Royal Institute of British Architects, may not be familiar to many Canadian architects. The SfB (Samarbetskommitten for Byggnadsfrågor) system, however, has been in use in Scandinavian countries for a number of years, and at the present time the British weekly newspapers "Architects Journal" and "Architect and Build-

ing News" are using the system to preclassify information articles and new products. The system uses a series of alphabetical and numerical symbols to denote functional elements, construction, and materials. The Manual presents the SfB system and related schedules from the Universal Decimal Classification, and attempts to provide guidance for the filing and indexing needs of all building offices.

In Great Britain it is hoped that manufacturers will publish their information literature in the format of the International Standardization Organization's paper size A4 (approx. 21 cm x 30 cm) and that all this literature will be preclassified by the SfB/UDC system.

Much of the Canadian trade literature is preclassified following the AIA/RAIC Standard Filing System. Canadian Building Abstracts issued by the Division of Building Research of the National Research Council of Canada are classified according to the ABC or Abridged Building Classification. These two systems might be adopted to meet the divergent needs of filing both manufacturers' literature and architectural and building practice literature in professional offices. Some architectural offices, however, might feel that the new SfB/UDC Filing Manual provides a system that more adequately meets their needs.

4. Retrieval of Building Information

A short-cut to sources of information is provided by abstracts, indexes and bibliographies.

4.1 Abstracts

The original and still best bulletin of monthly building science abstracts is

Building Science Abstracts.

Published by Her Majesty's Stationery Office.
Annual subscription £1.18s. Od. (approx. \$5.50) including Index and postage.

Articles are abstracted from the architectural and building periodical literature of the world.

Sample Entry:

Lighting UDC: 628.9:69.001.3

1462. The I.E.S. Code. Recommendations for good interior lighting, 1961: The Illuminating Engineering Society, London, 1961 (The Society), 60pp., 12s. 6d. In this completely new edition of the Code, the recommendations have been extended to cover wider aspects of lighting. Part I sets forth the basic theory . . . Part II covers some aspects of design . . . whilst Part III is the schedule for recommended values of illumination and limiting values of glare index for many occupations and buildings. A glossary and a bibliography are included.

A Canadian abstract bulletin which is published twice a year is:

Canadian Building Abstracts

Available from the Division of Building Research, National Research Council, Ottawa 2.
No charge.

Articles from Canadian architectural, building and construction magazines are abstracted.

Sample Entry:

181 UDC 691.53

Reid, T., V. E. Vaughan, and M. R. Foran. MORTARS AND MOISTURE. Journal of the Canadian Ceramic Society, Vol. 29, 1960, p. 79-84. The performance of mortars for unit masonry depends on their porosity, volume changes with wetting and drying. . . . Characteristics required for satisfactory performance . . . are discussed.

An abstract bulletin that surveys a very specialized building field is

Hospital Abstracts

Published by Her Majesty's Stationery Office.
Annual subscription £3.4s. Od. (approx. \$9) including Index and postage, P.O. Box 569, London, S.E.1, England.

Books, pamphlets and periodical articles from world literature on the whole field of hospitals and their administration, with the exception of strictly medical and related professional matters, are abstracted.

Sample Entry:

Safety Measures

1673. Blumat, D. Les dispositions antidéflagrantes dans les blocs opératoires. (Fire protection methods in operating suites). Annales de l'Institut Technique du Bâtiment et des Travaux Publics, Paris, 1960, Oct., vol. 30, no. 154, pp. 1096-1102.

Protection against explosions in operating theatres depends on two factors: Anti-static materials should be used. . . . The use of materials such as nylon . . . is prohibited. The flooring should have a uniform conductivity. . . . The suitability of several kinds of floor coverings . . . is considered.

Another service in the field of hospital literature is provided by a card service from

Hospital Planning Abstract Service

Published bi-monthly by the American Hospital Association, 840 North Lake Shore Drive, Chicago 11, Illinois. Annual subscription \$10.

North American books, pamphlets and periodical articles concerned with background trends, design and construction, financing, government programs, multi-hospital programs, needs, and planning guides are abstracted. The sample entry contains only about one-eighth of the abstract that appears on this particular card.

Sample Entry:

Design and Construction

Hospital building note 1: Buildings for the hospital service. Ministry of Health. 8p. Published by H.M.S.O., London. Available from York House, Kingsway, London, W.C. 2, England. Price 1s.6d.

This document, first of a series by the British Ministry of Health, was issued as a guide to regional hospital authorities, and others, including doctors, architects and engineers, on planning and preparing a hospital building program. Subsequent building notes will cover cost estimates and controls, design of departments and relationships among hospital departments.

The first step in planning. . . .

Heating and ventilating is another field covered by a specialized abstracting bulletin.

Heating and Ventilating Research Association.

Library Bulletin. Abstracts of recent technical literature.

Published by the Association, Old Bracknell Lane, Bracknell, Berks. England.

Sample Entry:

218 UDC 699.86:69.024.3

Investigations into the dampness of insulated flat roofs. B. H. Vos and F. J. Van Sante. *Gesundheits Ing.*, February 1961, 82, 2, 42-45 (in German)

In investigations into the dampness of insulated roofs, only those which were ventilated and had insulation above the main structure were found to be dry. The moisture content of the unventilated structures was found to be considerably higher than that recommended in the Dutch Standard V 1068. The authors recommend design to this standard and suggest. . . .

Fire Research Abstracts is the only specialized abstract publication in the Fire Research field. Other abstracting and indexing publications, however, such as Building Science Abstracts, Canadian Building Abstracts, Applied Science Abstracts, Engineering Index, (section 4.1) contain references to articles on fire research and fire protection. The abstracts in this publication are long and exhaustive. The following Sample Entry in only one-eighth the length of the published abstract.

Fire Research Abstracts and Reviews

Published three times a year by the Committee on Fire Research and the Fire Research Conference of the National Academy of Sciences, National Research Council, 2101 Constitution Avenue, Washington 25, D.C.

Sample Entry:

Ashton, L. A. and Smart, P. M. T. (Joint Fire Research Organization, Boreham Wood, England) "Sponsored Fire-Resistance Tests on Structural Elements", Report of Joint Fire Research Organization (Department of Scientific and Industrial Research and Fire Offices' Committee, London, England).

A compilation was made of the results of fire-resistance tests conducted in Great Britain on building elements of a proprietary nature or incorporating proprietary materials. The tests cover kinds of constructions available in the post-war years. Results of 81 specimens are included.

. . . an examination of results may be of value in indicating fire-resistance ratings. . . . Subject headings: Fire resistance, of building elements.

Many engineers have found that the Engineering Index Service is an invaluable aid in their work. Although this publication is called an index, it provides both abstracting and indexing services.

Engineering Index Service

Published by Engineering Index Inc.
United Engineering Center, 345 East 47th Street, New York 17, N.Y.

The Engineering Index Service is published both as a weekly card service and an annual bound volume. The cost of the bound volume is \$75. The card service is subdivided into 249 fields of interest. The subscription price to individual sections varies from \$12. to \$45. Over 1400 periodicals and society transactions in all languages are reviewed. Authoritative, informative, current and useful abstracts are published in this guide to the technological literature of the world.

Sample Entry:

CONCRETE CONSTRUCTION

Composite construction in precast and cast-in-place concrete, A. R. ANDERSON. *Civ Eng (NY)* v 30 n 3 Mar 1960 p 34-7. Composite concrete structures should combine economy and efficiency of mass-produced, high-strength elements with advantages of continuous monolithic structures hitherto cast in place at job site; test results show 7500 psi or more compressive strength in precast members; methods for column to footing, wall to column, beam to column and beam to slab jointings; welding of connecting ends of reinforcement and use of weldable steels; 12 figures show connecting methods.

4.2 Indexes

In addition to the Engineering Index which is discussed in section 4.1, Abstracts, a yearly index that has been found useful by architects in practice is

Architectural Index, compiled by E. J. Bell.

Published by the Architectural Index, 517 Bridgeway, Sausalito, California. Annual subscription \$5.

Periodicals indexed are Arts and Architecture (AA), Architectural Forum (AF), Architectural Record (AR), House and Home (HH), Interiors (INT), Progressive Architecture (PA) and the Journal of the American Institute of Architects (JAIA).

Sample Entries:

Government

City Hall; Toronto, Canada; Rewell, Parkin and Parkin; pl., m., p. 14-15; Dec 60; AR

City Hall; Toronto, Canada; Viljo Revel; m., pl., p. 20-22; Apr 60; AA

City Hall; Winnipeg, Canada; Green, Blankstein, Russell; m; p. 23, Nov 60; AA

Embassy Building; Oslo, Norway; Eero Saarinen; ph. pl.; p. 84-85, Apr 60; JAIA

Two indexing subscription services that have been found very useful are:

Art Index

Published by the H. W. Wilson Co., 950-972 University Avenue, New York, N.Y. Quarterly subscription is sold on a service basis which is based on the number of magazines indexed that are received by the subscriber.

The most important architectural periodicals in the world are indexed.

Sample Entry:

Library architecture

Bibliothèque de l'université de Giessen: H. Kohler, arch. il plans diags Arch d'aujourd'hui 31:96-9 Je 60

Library facilities: carrels and language laboratory in Barnard and Bennington colleges. il Progres Arch 41: 160-3 S '60

Rare building for rare books: Yale's new library designed by Skidmore, Owings and Merrill. il plans diags Arch Forum 113: 138-41 Nov 60.

Applied Science and Technology Index

Published by the H. W. Wilson Co., 950-972 University Avenue, New York, N.Y. Published monthly (except August). Subscription price \$24.

This is a cumulative subject index to periodicals in many fields including construction, engineering, and industrial and mechanical arts.

Sample Entry:

Auditoriums

Supporting structure for retractable roof of the Pittsburgh public auditorium. E. Cohen and H. R. Helvenston. il plans diags Am Concrete Inst J 58 (Proc): 185-202 Ag '61

Another source of information on articles that appear in the Canadian press is

Canadian Index to Periodicals and Documentary Films

Published by the Canadian Library Association, Room 510, 63 Sparks St., Ottawa 4.

This index, issued monthly, reviews articles in 71 Canadian magazines, at least 12 of which contain information useful in the building field.

Sample Entries:

Housing projects

Competition: CMHC Smyth Road. il plans Can Arch 6:46-54 S '61

Smyth Road competition. E. R. Arthur. il port plans Habitat 4:2-15 S-O '61

Housing projects, Municipal

Housing and social work. A. Smout. Can Wel 37: 228-33 S 15 '61

Housing project manager. P. Ringer. Can Wel 37: 234-7 S 15 '61

Two excellent but little-known aids to sources of building literature are distributed by the British Ministry of Works Library.

Great Britain. Ministry of Works Library.

Communication n. 18. Consolidated Building References to Articles in Periodicals.

Available from the Ministry Library, Lambeth Bridge House, London, S.E.1, England.

Items in this publication are arranged by the Universal Decimal Classification. Each volume contains a name index and an alphabetical key to classification. Yearly volume averages 246 foolscap pages.

Sample Entry:

69.024.5 Other Types of Roofs; Folded Plate

Suspended, Cantilever

69.024.5 Hanging roofs. A. HARRIS. Archt J. 1958, 128 (3328) (Dec. 11), 849-54. Illus. Structural analyses and examples of cable-suspended and continuous membrane roofs in which the tensile forces are supported by external rigid members. They are employed particularly for exhibition buildings, stadia and hangars where large clear-span areas are required. (P352/34)

Great Britain. Ministry of Works Library.

Communication n. 5. Consolidated Accessions List.

Available from the Ministry Library, Lambeth Bridge House, London, S.E.1.

This publication is arranged according to the Universal Decimal Classification. Each volume contains an Author Index and an Alphabetical Key to Classification. Yearly volume averages 79 foolscap pages and contains references to books, bulletins and reports.

Sample Entry:

72.03 ARCHITECTURAL HISTORY. STYLES

72.032.7(45) Roman construction in Italy from Tiberius through the Flavians. M. E. BLAKE. Washington, 1959 (Carnegie Institution), xvii, 195 p. and 31 plates., 6 illus., \$8.25. Descriptions of building activity in Rome from A.D. 14 to 96, from contemporary documentary evidence. (403/35)

A valuable guide to world literature on fire is distributed yearly by the British Joint Fire Research Organization. A volume averages over 100 pages and includes name and subject indexes.

Great Britain. Department of Scientific and Industrial Research and Fire Offices' Committee. Joint Fire Research Organization

Library Bibliography n. 5. References to Scientific Literature on Fire. Available from the Fire Research Station, Boreham Wood, Herts., England.

4.3 Bibliographies

Bibliographies are helpful in giving an overall review of particular areas of the building industry. A surprising number are issued at regular intervals. Some of the organizations that issue such bibliographies are listed below followed by an example of a pertinent issue.

Cement and Concrete Association (London).
Library Bibliography n. 33 Hospitals

Council of Planning Librarians Exchange. Bibliography n. 17: Planned industrial districts

Great Britain. D.S.I.R. Building Research Station. Library Bibliography n. 183: Tower cranes

Great Britain. Agricultural Research Council Bibliography on Farm Buildings Research, Pt. 5: Buildings for the drying and storage of grain

Institution of Civil Engineers.
Bibliography on Prestressed Concrete

Royal Institute of British Architects Library (Bibliography). Theatres and Schools of Dramatic Art, 1955-1960

Bibliographies are also published in many building magazines. An excellent example was the bibliography on schools that appeared in the Library Notes section of the September 1961 issue of the American Institute of Architects Journal.

5. Digests of Building Information

A digest is a short summation or the compressed kernel of a body of information. Many building organizations and associations of the world issue this type of useful short publication. Each digest is generally concerned with one topic.

5.1 Building Research Station Digests

The first BRS digest was published in December 1948. The series continued for 135 digests when it was closed out with an index. The first digest in the second series followed in June 1960. The second series digests conform in size to the International Standardization Organization's A4 paper size (approx. 21 cm x 30 cm), which has been suggested as a uniform size for international building literature. The digests in the new series are classified by the Universal Decimal Classification and by the Sfb Filing System. The annual subscription is 6s. 6d., including postage to Her Majesty's Stationery Office, P.O. Box 569, London, S. E. 1, England

Typical digests are:

1st series n. 88, May 1956. Sound insulation of dwellings.

n. 98, May 1957. Light cladding — part 1 — General principles of design.

n. 135, June 1960. The permanent supplementary artificial lighting of interiors.

2nd series n. 1, June 1960. Research and its users.

n. 8, March 1961. Built-up felt roofs.

n. 12, July 1961. Structural design in architecture.

5.2 Canadian Building Digests

The first digest in this monthly series appeared in January 1960. They are classified by the Universal Decimal Classification, and are available from the Publications Section, Division of Building Research, National Research Council, Ottawa, Canada.

Examples of Digests from DBR/NRC are:

CBD 1, January 1960. Humidity in Canadian buildings.

CBD 18, June 1961. The strength of small roofs.

CBD 25, January 1962. Window air leakage.

5.3 Notes on the Science of Building

The Australian Commonwealth Experimental Building Station publishes these notes, the first of which was published in August 1949. They are classified by the Universal Decimal Classification and are distributed by the Commonwealth Experimental Building Station, P.O. Box 30, Chatswood, New South Wales, Australia. Examples of this series are:

NSB n. 43, February 1957. Natural ventilation of buildings.

n. 53, June 1959. Some fire requirements of buildings.

n. 66, August 1961. Some fire aspects of the use of combustible wallboards.

5.4 South African National Building Research Institute Information Sheets

The first Information Sheet appeared in November 1948. Classified by the Universal Decimal Classification they tell practical men of developments in the building industry. Each gives the answers to two or more questions received as inquiries from outside bodies. Copies of the Information Sheets may be obtained from the National Building Research Institute, P.O. Box 395, Pretoria, South Africa. Examples:

n. 43, November 1955. The effect of dust on an artificial light installation. The use of finely crushed stone in concrete. Types of wood sheet piles. Fracture in prestressing wire of a prestressed concrete tank. Watertightness around roofing screws and washers.

n. 78, September 1961. Thermal comfort. Flood damaged buildings.

5.5 Institut Technique du Bâtiment et des Travaux Publics. Notes techniques et d'information.

These notes, first published in 1957, are available from the ISTB, 6 rue Paul Valery, Paris 16. Examples:

NT 22, février 1957. Essais de plasticité sur mortier.

NT 57, mars-avril 1961. Contrôle du béton frais.

NI 27, octobre 1957. Quelques problèmes d'acoustique.

NI 61, 1961. La photoélasticimétrie.

5.6 *Structural Clay Products Institute.*

Technical Notes on Brick and Tile Construction.

The first Technical Note on Brick and Tile Construction was published in January 1950. The notes were published monthly until January 1961 when a new series was begun on the same basis. They are distributed in Canada by the Brick and Tile Manufacturers Association of Canada, 4824 Yonge Street, Willowdale, Ontario. Examples:

Technical Notes, v. 7, n. 11, November 1956. Mortars for unit masonry. v. 11, n. 2 February 1960. High lift grouted reinforced brick masonry. n. 1, January 1961. Cold weather masonry construction.

5.7 *Building Information Bulletin*

This digest is published by the Building Research Bureau of New Zealand, 66 Murphy St., Wellington, New Zealand. It is classified by the Universal Decimal Classification. Some of the subjects treated are:

Bulletin n. 1 August 1959. New materials — a cautionary tale.

n. 5, December 1959. Fire hazard with slow combustion stove installation.

n. 7, February 1960. Clear finishes for external timberwork.

n. 26, September 1961. Floor coverings on concrete slabs.

5.8 *Ministry of Works Advisory Leaflets*

The British Ministry of Works Advisory Leaflets are designed as guides to good building and provide information about the results of research and the latest developments in building practice. Published by Her Majesty's Stationery Office, P.O. Box 569, London, S.E. 1, England, the leaflets cost 4d. each.

Examples:

Leaflet n. 35, 1953. Prestressed concrete.

n. 36, 1954. Metal scaffolding.

n. 51 and 52 1961. Watertight basements, parts 1 and 2.

6. *DBR/NRC Library*

The DBR/NRC Library was established in 1948 shortly after the formation of the Division. It is a branch of the National Research Council Library, which is the national science library of Canada.

6.1 *Resources of the Library*

The DBR/NRC Library has a stock of over 5000 books. Its pamphlet collection numbers over 60,000, and about 500 magazines are received regularly. The books, pamphlets and magazines are received from all over the world. As the Division is a member of the International Council for Building Research, Studies and Documentation (CIB), the abstracts published by member countries such as the Scandinavian Byggliteratur are included in the library's holdings.

6.2 *Arrangement of its Collection*

Four different methods are used for the arrangement of the four distinct types of literature housed in the Library. This does not cause any confusion, however, as each type of material is arranged according to the system best suited to its particular character. The books are shelved according to the Library of Congress Classification. The pamphlets are filed by the Universal Decimal Classification. The magazines are filed on shelves in alphabetical order according to their titles. The manufacturers' technical literature is filed in cabinets according to the AIA.

6.3 *Special Features of its Collection*

In addition to the literature already described, the library has a collection of films that are available for loan. A list of these films will be furnished on request.

6.4 *Availability of its Collection*

The Library of the Division of Building Research publishes a monthly list of recent additions and a yearly list of selected books, any of which may be borrowed for a stated period of time. Dictionaries, reference books, indexes and abstracts are not loaned. The only restriction on loans relates to the number of books that may be borrowed at one time: no more than six items may go to one individual at one time. Such borrowing is a good method of finding out whether the purchase of a certain book is a necessity. By far the greater part of the publications listed in the DBR Library's lists will provide information of a nature that is needed by Canadian architects, engineers

and contractors. One word of caution must be given about the possibility that a publication from these lists might prove a disappointment as far as the usefulness of its statement of practice under Canadian conditions is concerned. One should remember that the Library of the Division of Building Research is a branch of the National Research Council Library, which serves also as the National Science Library of Canada. For this reason many books illustrating practices and theories foreign to Canadian requirements are included in its collection of literature.

6.5 Services

The Library staff will be pleased to assist in supplying information about publications that are difficult to locate. A list is included at the end of this Digest of some of the books, pamphlet series, abstracts, bibliographies and magazines that the library receives from countries other than the United States, Great Britain, and Canada. This list is arranged by countries and has been included to indicate the nature of the collection that is housed in the Divisional library. If you wish further information about any of the items, inquiries should be sent to the Librarian, Division of Building Research, National Research Council, Ottawa 2.

Another service provided by the NRC library staff is that of photo-duplicating. This facility reproduces articles in magazines. Requests for the purchase of such copies will be handled by the DBR Library.

Visitors are always welcome in the DBR/NRC Library which has been developed to serve the building industry as well as the staff of the Division. The Library is open during normal working hours.

AUSTRALIA

Books

Houses, Interiors and Projects, by Harry Seidler.

Magazines

Architectural Science Review, Constructional Review

Pamphlets

C.S.I.R.O. Division of Building Research Technical Paper n. 9. Mechanical properties and dimensional changes in some perlite plasters, by J. J. Russell and others.

Abstracts

Abstracts prepared for the International Council for Building Research, Studies and Documentation.

Building information; a review of current literature on building for the designer, manufacturer and user.

AUSTRIA

Magazines

Der Aufbau
Wohnbauforschung in Oesterreich

BELGIUM

Magazines

L'Entrepreneur Général

Abstracts

CEDOC-Biblio

BRAZIL

Books

Associacao Brasileiro de Mecânica dos Solos.
Anais do II Congresso Brasileiro de Mecânica dos Solos, Volume I.

Magazines

Habitat

CZECHOSLOVAKIA

Books

Czechoslovakia, by Frantisek Rachlik

Magazines

Zpravy

Pamphlets

Bureau of Water Schemes, Construction Development and Management. Water conservation in Czechoslovakia, by Antonin Chlum.

DENMARK

Books

Byggebogen, edited by Poul Kjaergaard.
2 volumes.

Magazines

Arkitektur
Beton Teknik
Bygge Industrien

Pamphlets

Danish National Institute of Building Research Report 40. Water repellents for exterior brickwork, by H. Duhrkop and C. Falk (In Danish).

Abstracts

Byggliteratur (Abstracts prepared by the Scandinavian countries for the International Council on Building Research, Studies and Documentation)

FINLAND

Books

Foundation of Buildings and Soil Mechanics; Part 1; Geotechnics, by K. V. Helenelund (In Finnish)

Magazines

ARK; Arkkitehti Arkitecten

Pamphlets

State Institute for Technical Research Publication n. 64. On the bending of the over-reinforced concrete beams with rectangular cross section, by Lauri Mehto (In Finnish)

Abstracts

Byggliteratur

FRANCE

Books

Centre Scientifique et Technique du Bâtiment.
R.E.E.F. 58; Recueil des Eléments Utiles à l'Établissement et à l'Exécution des Projets et Marchés des Bâtiments en France. 5 Volumes.

Magazines

Annales de l'Institut Technique du Bâtiment et des Travaux Publics
L'architecture aujourd'hui
Bâtir
Cahiers de la Centre Scientifique et Technique du Bâtiment

Pamphlets

Service National de la Protection Civic. Protection contre l'Incendie Serie A. Report on the relative studies of convection currents due to a large area fire (In French)

Abstracts

Abstracts are published in the magazines listed. Those published in CAHIERS are prepared for the International Council of Building Research, Studies and Documentation.

GERMANY

Books

The Fireplace, by Fritz R. Barran (In German)

Magazines

baukunst und werkform
DB; Deutsche Bauzeitung
DBZ; Deutsche Bauzeitschrift

Pamphlets

Bundesministerium fuer Wohnungsbau.
Building research in residential construction; excerpts from the research work of the last few years (in German)

Abstracts

Schrifttumkartei Bauwesen
Zement-Kalk-Gips-Kartei

HOLLAND

Books

Bouwcentrum. Houses (In Dutch)
1 looseleaf volume

Magazines

Bouw
Bouwt in Beton

Pamphlets

Hoofdecommissie voor de Normalisatie in Nederland NEN 3123. Building fire protection code; part 4; code for high apartment buildings (In Dutch)

Abstracts

Abstracts prepared by the Bouwcentrum for the International Council for Building Research, Studies and Documentation.

INDIA

Books

Shadows from India; an architectural album, by Roderick Cameron.

Magazines

Indian Builder
Journal of the National Buildings Organisation
PaintIndia

Pamphlets

National Buildings Organisation Technical Information series n. 15 Thermal movements and expansion joints in buildings.

Abstracts

N.B.O. Abstracts

INDONESIA

Magazines

Masalah Bangunan

Abstracts

Abstracts prepared for the International Council for Building Research, Studies and Documentation

ITALY

Books

Exhibitions and Displays, by Erberto Carboni

Magazines

Casabella
Domus
Geotecnica

Pamphlets

Ministero dei Lavori pubblici. Coordinated housing (In Italian)

ISRAEL

Books

Soil construction; its principles and application for housing, by S. Cytryn

Pamphlets

Institute of Technology Building Research Station Research Paper n. 8. Prestressed concrete composite floors; theoretical and experimental study, by S. Rosenhaupt and others.

JAPAN

Books

Building Techniques of Japan, edited by Kin-ichiro Fujita and others

Magazines

Gypsum and Lime
Japan Architect
Low Temperature Science

Pamphlets

Building Research Institute Report n. 31 Studies on the construction method of the incombustible residential houses.

JUGOSLAVIA

Magazines

Dokumentacija za Gradevinarstvo i Arhitekturu
Contains technical articles, data sheets and abstracts

NORWAY

Books

NBI (Norwegian Building Research Institute)
Byggdetaljer

Magazines

BBL Informasjon
Nordisk Betong

Pamphlets

Norwegian Building Research Institute Report n. 26 Deflection characteristics of wood joist floors, by Henry Hansen. (In Norwegian)
This report appears in English as Translation n. 59 of the Division of Building Research of the National Research Council of Canada.

Abstracts

Byggliteratur

POLAND

Magazines

Archiwum Inzynierii Ladowej

Pamphlets

Institute of Building Technology Publication, series 1, Building Materials and their Applications, n. 3. Investigations in the thixotropy of clay suspensions and their applications in building (In Polish)

Abstracts

Polish Technical Abstracts

PORTUGAL

Pamphlets

National Laboratory of Civil Engineering Memoir n. 138. On the use of low-density polyethylene tubes in water pipes, by A. J. Fernandes (In Portuguese)

ROUMANIA

Magazines

Buletinul de Studii si Cercetari Stiintifice in Constructii, Materiale de Constructii, Arhitectura si Sistematare

RUSSIA

Books

Building Materials and Spectroscopy, edited by K. V. Astakhov (In Russian)

Magazines

Arkitektura SSSR
Beton i Zhelezo-Beton
Mekhanizatsiia Stroitel'stva
Stroitel'stvo i Arkitektura Leningrada
Stroitel'stvo i Arkitektura Moskv

Pamphlets

Akademiia Stroitel'stva i Arkhitektury SSSR.
Sbornik n. 9. Rational and economic construction (in Russian)

Abstracts

Referativnyi Zhurnal Stroitel'stvo i Arkhitektura

SOUTH AFRICA

Books

Concrete Technology; a South African Handbook, 2nd ed., by F. O. Fulton.

Magazines

Civil Engineer in South Africa
Construction in South Africa
South African Builder
South African Architectural Record

Pamphlets

National Building Research Institute Technical Report n. 7. Colour and the child; colour and its contribution to school and hostel buildings. The report describes research into the use of colour to provide a suitable pleasant environment for the children in South African schools.

SPAIN

Magazines

Cemento Hormigon
Informes de la Construcción
Revista de Obras Publicas

Pamphlets

Instituto Tecnico de la Construcción y del Cemento, n. 209. Architectural problems in prefabricated buildings, by S. Albinana Pifarre. (In Spanish)

SWEDEN

Books

Bygg; Handbok for Hus, Vag- och Vattenbyggnad, edited by Borge Algers. 3 volumes.

Magazines

Arkitektur; the Swedish Architectural Review
Byggmastaren; Journal of Swedish Building
Cement & Betong

Pamphlets

Swedish State Committee for Building Research
Report n. 62 Flat roofs; waterproofing layers and protective coverings, by Rune Hanson (In Swedish)

Abstracts

Byggliteratur

SWITZERLAND

Magazines

Werk

Pamphlets

Swiss Federal Snow and Avalanche Research
Institute Report n. 10. Blasting as a means of
avalanche protection, by Melchior Schild.

Abstracts

Bulletin Technique de la Suisse Romande

This is one of a series of publications being produced by the Division of Building Research of the National Research Council. It may be reproduced without amendment if credit acknowledgement is made. The Division has issued many publications describing the work carried out in the several fields of research for which it is responsible. A list of these publications and additional copies of this Building Digest can be obtained by writing to the Publications Section, Division of Building Research, National Research Council, Ottawa, Canada.